## **Ancient Australian Landscapes**

by C R Twidale

## Publisher: Rosenberg Publishing, Dural, NSW, 2007. 144 pages, paperback, photographs. ISBN 9781877058448. RRP \$39.95

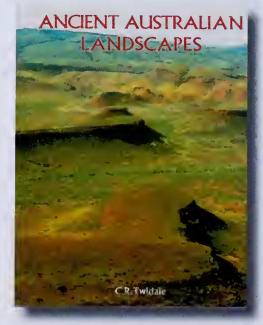
This A4 sized, soft-covered volume is the latest in a series of books on Australian landscapes either authored by CR Twidale or jointly authored by him with EM Campbell.

In his preface, Twidale states that 'For the author... the antiquity of some parts of landscapes has engaged his interest for more than half a century ...' Throughout the book Twidale explores this concept of the survival of Australian landscapes of great antiquity with sometimes unconventional views on the evolution and relief of landforms within those landscapes.

The initial chapters develop the concept of Australia as a geologically ancient continent and review its surfaces and the methods used for estimating their ages. South Australian uplands, South Australian cratons and basins, south-west and west Australia, northern Australia, central Australia, and eastern uplands have a chapter each studying and analysing their palaeo landforms. The ensuing chapters examine the reasons for the survival and persistence of remnants of very old surfaces and areas of relief in the Australian landscape. Finally, Twidale takes the reader through a short discussion clarifying the many and varied arguments that he developed throughout the book.

As would be expected from a book that is a detailed study of all aspects of ancient landscapes and their landforms, this volume includes many beautiful photographic images on almost every page, in both colour and black and white, to illustrate the ideas of the author. Many useful maps and diagrams are also included.

To assist the reader with the terminology of landscapes, a five-page glossary of terms is given. Access to the wider literature of Australian landforms and landscapes is provided by 13 pages of references. A comprehensive index enables specific localities and topics to be easily found.



Informative biographical notes on well-known and not so widely-known pioneering Australian geomorphologists and experts in the interpretation of landforms and their evolution are used at the beginning of eight chapters of the book.

If the chart provided in Gradstein, Ogg, and Smith (2004) is accepted, then Twidale's geological time scale chart, Table 1.1, p. 12, is out-of-date in terms of both nomenclature and boundary dates.

The index entry for 'Gondwana' on p. 121 places the existence of the supercontinent in the time span from 1100 to 2000 million years ago. This should read 1100 to 200 million years ago (Twidale and Campbell, 2005).

Who would find interest in this lavishly illustrated book with its comprehensive analysis of Australia's unique, ancient geological landscapes? Any person with a curiosity in landscapes and landforms, be they professional geologists, students of geology, or interested amateurs, will find interest in this book. For some, this could be a useful book to take with them on journeys throughout Australia to enable them to gain a better understanding of the geology of the landscapes that they pass through. Others may take a special interest in deciding to agree or disagree with some of the ideas offered by the author. If natural landscapes, their ages and their dynamic evolutionary history are of interest to you, at whatever level, this book is for you.

## References

- Gradstein F, Ogg J and Smith A (eds) (2004) A Geologic Time Scale. (Cambridge University Press: Sydney)
- Twidale CR (1968) Geomorphology with Special Reference to Australia. (Nelson: Sydney)
- Twidale CR (1976) Analysis of Landforms. (Wiley: Sydney) Twidale CR and Campbell EM (1993) Australian Landforms: Structure, Process and Time. (Gleneagles: Sydney)
- Twidale CR and Campbell EM (2005) Australian Landforms. Understanding a Low, Flat, Arid and Old Landscape. (Rosenberg: Dural NSW)

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## Bettongs, potoroos and the Musky Rat-kangaroo

by Andrew Claridge, John Seebeck and Randy Rose

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Bettongs and potoroos have not fared well since European settlement in Victoria. The three species of bettongs once present in the state-the Brush-tailed Bettong, the Rufous Bettong and the Tasmanian Bettong-have disappeared. Of Victoria's remaining rat-kangaroos, the vulnerable Long-nosed Potoroo has a reduced range and the endangered Long-footed Potoroo occurs in few localities. A similar pattern of decline has taken place across much of Australia. However, as this new book shows, it's not all bad news.

Bettongs, potoroos and the Musky Rat-kangaroo provides a comprehensive account of Australia's eleven species of modern rat-kangaroos. It covers a wide range of subjects on this intriguing suite of species including: distribution and habitat requirements; taxonomy; biology and behaviour; diet; research methods; and conservation management. The opening chapter focuses on early rat-kangaroo discoveries, and documents the decline of a number of species. Two of the more exciting events discussed are the discovery of the Long-footed Potoroo in east Gippsland in 1967 and the fortuitous rediscovery of Gilbert's Potoroo in Western Australia in 1994 (it had been presumed extinct for 120 years).

